

GUIDELINES TO REQUEST ELEMENTAL ANALYSIS

Elemental analysis (Carbon, Hydrogen and Nitrogen) is performed using a Perkin Elmer CHN Analyzer 2400 Series II. For chemical characterization of compounds, samples of high purity (98-99%) are required; otherwise, the values obtained from the analysis are not useful.

Samples submission:

- To start an analysis, a minimum batch of five (5) samples/replicates are required with similar carbon content.
- Fill out for every sample a "Sample Analysis Request" fillable form, acquired from our website or from Patricia.Granados@smu.ca.
- A minimum of 10mg for C, H, and N analyses is required for synthesis products. For natural products, a minimum of 50mg is required, consult with CEAR technician.
- All samples must be supplied in clearly labeled, closed sample vials. Labels must include user's name, sample identifier, and hazards. Samples cannot be accepted in miscellaneous laboratory flasks.
- Air-sensitive and hygroscopic samples should be scheduled ahead of time with the CEAR technician. You will be provided with the instructions to prepare and submit your samples.
- Submit the samples directly to CEAR Technician, room S501 or S505, Chemistry Department.
- Indicate all elements present in the sample to evaluate results.
- Provide accurate estimates of chemical composition. This information is used to determine optimal sample weight for analysis, avoiding unnecessary retests, out-of-range results, and waste of sample.

Sample Analyses

- Samples are analyzed in the order received, as soon as capacity allows. If required emergency analyses please contact the Centre for arrangements.
- Unless otherwise instructed, all samples are held for a maximum period of one (1) month under room temperature or refrigerated at 0-10°C if specified. Users are responsible for collecting their sample vials if necessary.
- Users will be contacted by email once samples are analyzed. Results can be sent by email or picked up at the Centre.

Reports

- All paper and electronic records are stored for a maximum of one (1) year following analysis. Electronic data from our analytical instruments is automatically captured and archived in specified dated files. Data is periodically archived and removed from the computer.